



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,374	11/19/2003	Jean-Francois Lafon	245516US41X DIV	5478
22850	7590	06/18/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			TRAN, DALENA	
			ART UNIT	PAPER NUMBER
			3661	
DATE MAILED: 06/18/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Applicati n No.

10/715,374

Applicant(s)

LAFON ET AL.

Examiner

Dalena Tran

Art Unit

3661

-- The MAILING DATE of this communication appears n the cover sheet with the corres pondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/19/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### **Notice to Applicant(s)**

1. This application has been examined. Claims 1-16 are pending.
2. The prior art submitted on 2/19/04 has been considered.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1,3-8, and 10-12, are rejected under 35 U.S.C.103(a) as being unpatentable over Bang et al. (5,715,163) in view of Snyder et al. (6,664,989).

As per claim 1, Bang et al. disclose a dialog method for dialog between an operator of an aircraft and at least one system of the aircraft, comprising the steps of: displaying on a display at least one window including a plurality of responsive objects respectively associated with one of multiple functions of the at least one system of the aircraft (see the abstract; and column 2, lines 53-67), and moving a cursor in a discrete manner on the display, responsive object by responsive object, so as to designate a responsive object (see column 1, line 48 to column 2, line 10; and column 5, lines 38-44). Bang et al. do not disclose moving a cursor in a continuous manner. However, Snyder et al. disclose moving a cursor in a continuous manner on the display so as to designate a responsive object (see the abstract; and column 6, lines 38-52). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Bang et al. by combining moving a cursor in a continuous manner on the display for

Art Unit: 3661

continuously activate or deactivate menu selection in the display screen provide a faster rate of viewing and selection objects in the display.

As per claim 3, Bang et al. disclose activating a function associated with the responsive object designated by the step of moving a cursor in a discrete manner on the display (see column 4, lines 28-61). Bang et al. do not disclose activating a function associated with the responsive object designated by the step of moving a cursor in a continuous manner on the display.

However, Snyder et al. disclose activating a function associated with the responsive object designated by the step of moving a cursor in a continuous manner on the display (see column 5, line 50 to column 6, line 9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Bang et al. by combining activating a function associated with the responsive object designated by the step of moving a cursor in a continuous manner on the display in order to execute a selection of the desired object.

Also, as per claim 4, Bang et al. disclose step of activating the function associated with the responsive object designated by the step of moving a cursor in a discrete manner on the display is performed with an Enter key on a keyboard (see column 3, lines 1-12). Bang et al. do not disclose moving a cursor in a continuous manner with a key on a mouse. However, Snyder et al. disclose step of activating the function associated with the responsive object designated by the step of moving a cursor in a continuous manner on the display is performed with a key on a mouse (see column 3, lines 8-13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Bang et al. by combining activating the function associated with the responsive object in a continuous manner on the display with a key on a mouse for easily selection a desired command in the interface for the flight crew.

Art Unit: 3661

As per claim 5, Bang et al. do not disclose plurality of windows. However, Snyder et al. disclose the at least one window includes a plurality of windows, and moving the cursor discretely from one window to another window in the plurality of windows (see column 3, line 49 to column 4, line 13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Bang et al. by combining plurality of windows to provide multifunction communications between and operator and the aircraft system.

As per claim 6, Bang et al. do not disclose a default field. However, Snyder et al. disclose each window is divided into a plurality of fields each including at least one responsive object (see column 4, lines 32-65), and each window includes one default field on which the cursor arrives after moving from one window to another window (see column 4, lines 13-31). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Bang et al. by combining each window includes one default field for easily to locate the cursor position and located an object being selected to view.

Also, as per claim 7, Snyder et al. disclose each default field includes one default responsive object (see column 4, lines 32-65).

As per claim 8, Bang et al. do not disclose a Tab key. However, Snyder et al. disclose step of moving one window to another window is performed with a Tab key on a keyboard (see column 4, lines 14-31). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Bang et al. by combining moving one window to another window is performed with a Tab key on a keyboard for fast and conveniently select a desired window for viewing.

Art Unit: 3661

As per claim 10, Bang et al. disclose automatically moving the cursor to a responsive object via a single action by the operator (see column 3, lines 12-40).

As per claim 11, Bang et al. disclose moving the cursor in the discrete manner on the display with a keyboard (see column 3, lines 12-40). Bang et al. do not disclose moving a cursor in a continuous manner. However, Snyder et al. disclose moving a cursor in a continuous manner on the display with a mouse (see column 3, lines 8-13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Bang et al. by combining moving a cursor in a continuous manner on the display for continuously activate or deactivate menu selection in the display screen provide a faster rate of viewing and selection objects in the display.

As per claim 12, Bang et al. disclose moving the cursor in the discrete manner on the display moves the cursor discretely on the display, responsive object by responsive object, in a cyclical manner (see column 4, line 62 to column 5, line 44; and column 6, lines 6-40).

5. Claim 2, is rejected under 35 U.S.C.103(a) as being unpatentable over Bang et al. (5,715,163), and Snyder et al. (6,664,989) as applied to claim 1 above, and further in view of Houlberg (6,172,747).

As per claim 2, Snyder et al. disclose moving the cursor in the continuous manner on the display with a control ball on a mouse (see column 3, lines 8-13). Bang et al., and Snyder et al. do not disclose an arrow key on a keyboard. However, Houlberg discloses moving the cursor in the discrete manner on the display with an arrow key on a keyboard (see column 11, lines 12-15). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Bang et al., and Snyder et al. by combining moving the cursor

Art Unit: 3661

in the discrete manner on the display with an arrow key on a keyboard allow the operator to skip through plurality of screen display with convenient and faster rate.

6. Claim 9, is rejected under 35 U.S.C.103(a) as being unpatentable over Bang et al. (5,715,163), and Snyder et al. (6,664,989) as applied to claim 1 above, and further in view of Beeks (6,104,969).

As per claim 9, Bang et al., and Snyder et al. do not disclose moving the cursor in the discrete manner on the display is activated during an emergency mode of the aircraft. However, Beeks discloses moving the cursor in the discrete manner on the display is activated during an emergency mode of the aircraft (see the abstract; and column 1, line 65 to column 2, line 12). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Bang et al., and Snyder et al. by combining moving the cursor in the discrete manner on the display is activated during an emergency mode of the aircraft to provide an operator ability to accurately manipulate a cursor location during periods of erratic vehicle moment that is easily to place the cursor in an unintended location of the display.

7. Claims 13-16, are rejected under 35 U.S.C.103(a) as being unpatentable over Bang et al. (5,715,163), and Snyder et al. (6,664,989) as applied to claim 1 above, and further in view of Muller et al. (6,072,473).

As per claim 13, Bang et al., and Snyder et al. do not disclose plurality of displays. However, Muller et al. disclose the display includes a plurality of displays, and moving the cursor from one display to another display in the plurality of displays (see column 4, line 58 to column 5, line 39; and column 6, lines 62-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Bang et al., and Snyder

Art Unit: 3661

et al. by combining plurality of displays so the pilot and co-pilot in the airplane easy to view and interact with the system.

As per claim 14, Snyder et al. disclose each window includes a plurality of windows, each window is divided into a plurality of fields each including at least one responsive object (see column 4, lines 13-31), and each display includes one default field on which the cursor arrives after moving from one window to another window (see column 3, line 49 to column 4, line 13).

As per claim 15, Snyder et al. disclose the cursor is moved from one display to another display via one of a key on a mouse and a key on a keyboard (see column 3, lines 8-13).

As per claim 16, Bang et al., and Snyder et al. do not disclose eight displays. However, it is obvious one can design a plurality of display for use by the pilot and the co-pilot. For example, Muller et al. disclose six displays (see column 3, line 36 to column 4, line 5), it is obvious that screens 7-10 can used by each of the pilots, central screen 11 can common used by each of the pilots. Therefore, it is obvious that the display can included eight displays, of which three displays are for a pilot of the aircraft, three other displays are for the co-pilot, and two displays are for common use by the pilot and co-pilot.

### **Conclusion**

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

. Oder et al. (5,519,392)

. Briffe et al. (6,057,786)

. Bomans et al. (6,094,608)



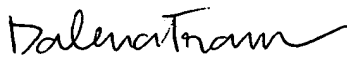
Art Unit: 3661

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 703-308-8223. The examiner can normally be reached on M-F (7:30 AM-5:30 PM), off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 703-305-8233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner  
Dalena Tran



June 10, 2004